

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. - 18. (Cancelled)

19. (Currently Amended) An immunogenic composition comprising:

(a) an antigen that comprises a ~~C-terminal-truncated gp160 protein that,~~
~~wherein the C-terminal-truncated gp160 protein includes~~ (1) is truncated at the C-terminal end
such that the truncated gp160 protein has a molecular mass of about 140 kDa, and (2) comprises
the endogenous hydrophobic amino acid sequence set forth at positions 523-551 of SEQ ID
NO:1;

(b) proteosomes, wherein the proteosomes are complexed or coupled with the
antigen; and

(c) bioadhesive nanoemulsions,

wherein the composition elicits neutralizing antibodies to HIV in a subject upon
administration of the composition to the subject, and wherein the neutralizing antibodies are
present in one or more of vaginal secretions, intestinal secretions, lung secretions, and feces.

20. (Cancelled)

21. (Previously Presented) The immunogenic composition according to claim
19 wherein the antigen is admixed with the proteosomes to form a proteosome/antigen complex,
which complex is then combined with the bioadhesive nanoemulsions.

22. (Previously Presented) The immunogenic composition according to claim 21 wherein admixing is performed in the presence of a detergent, followed by removal of the detergent by dialysis.

23. (Previously Presented) The immunogenic composition according to claim 21 wherein admixing is performed by lyophilization.

24. (New) The immunogenic composition according to claim 19 wherein the antigen further comprises an exogenous hydrophobic material that is a C8-C18 fatty acyl group.

25. (New) The immunogenic composition according to claim 24 wherein the exogenous hydrophobic material is lauroyl.

26. (New) The immunogenic composition according to claim 19 wherein the truncated gp160 protein is a truncated gp160 oligomer.

27. (New) The immunogenic composition according to claim 19 wherein the amino acid sequence of the truncated gp160 protein consists essentially of the sequence set forth at residues 33-681 of SEQ ID NO:1.

28. (New) The immunogenic composition according to claim 19 wherein the truncated gp160 protein is recombinantly produced.

29. (New) The immunogenic composition according to claim 19 wherein the truncated gp160 protein natively contains at least one cysteine residue or has at least one added cysteine residue.

30. (New) The immunogenic composition according to claim 19 wherein the proteosomes are hydrophobic, multimolecular membrane proteins.

31. (New) The immunogenic composition according to either claim 24 or claim 25 formed by:

(a) bonding the exogenous hydrophobic material to the truncated gp160 protein to form a hydrophobic-hydrophilic compound; and

(b) admixing said compound with said proteosomes such that said compound is complexed with said proteosomes; and

(c) combining the compound complexed with said proteosomes with the bioadhesive nanoemulsions.

32. (New) The immunogenic composition according to claim 31 wherein said admixing step is performed in the presence of a detergent, and is followed by the step of removing the detergent by dialysis.

33. (New) The immunogenic composition according to claim 31 wherein said admixing step is performed by lyophilization.

34. (New) The immunogenic composition according to claim 19 formulated for intranasal or respiratory administration.

35. (New) The immunogenic composition according to claim 19 wherein the immunogenic composition is in a dosage form suitable for multiple inoculations.